

HOKAZONO1 (AOYB)\_ST25.txt  
SEQUENCE LISTING

<110> TAKARA BIO INC.  
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UEMORI, Takashi  
TANAKA, Tetsuki  
KATO, Ikunoshin

<120> Thermostable RNase H

<130> HOKAZONO1

<140> 10/536,073

<141> 2005-02-28

<150> JP 2002-254153

<151> 2002-08-30

<150> PCT/JP03/10727

<151> 2003-08-26

<160> 16

<170> PatentIn version 3.5

<210> 1

<211> 211

<212> PRT

<213> Archaeoglobus profundus

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1 5 10 15

Leu Val Ile Cys Gly Val Leu Cys Asp Glu Glu Thr Val Glu Tyr Leu  
20 25 30

Lys Ser Val Gly Val Lys Asp Ser Lys Lys Leu Asp Arg Arg Lys Arg  
35 40 45

Glu Glu Leu Tyr Asn Ile Ile Lys Ser Leu Cys Lys Val Lys Val Leu  
50 55 60

Lys Ile Ser Val Glu Asp Leu Asn Arg Leu Met Glu Tyr Met Ser Ile  
65 70 75 80

Asn Glu Ile Leu Lys Arg Ala Tyr Val Glu Ile Ile Arg Ser Leu Met  
85 90 95

Pro Lys Val Val Tyr Ile Asp Cys Pro Asp Ile Asn Val Glu Arg Phe  
100 105 110

Lys His Glu Ile Glu Glu Arg Thr Gly Val Glu Val Phe Ala Ser His  
115 120 125

Lys Ala Asp Glu Ile Tyr Pro Ile Val Ser Ile Ala Ser Ile Val Ala  
130 135 140

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Lys Val Glu Arg Asp Phe Glu Ile Asp Lys Leu Lys Lys Ile Tyr Gly  
145 150 155 160

Asp Phe Gly Ser Gly Tyr Pro Ser Asp Leu Arg Thr Ile Glu Phe Leu  
165 170 175

Arg Ser Tyr Leu Arg Glu His Lys Ser Phe Pro Pro Ile Val Arg Lys  
180 185 190

Arg Trp Lys Thr Leu Lys Arg Leu Thr Thr His Thr Leu Ser Asp Phe  
195 200 205

Phe Glu Val  
210

<210> 2  
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aagaagctgg ataggaggaa gagagaggaa ctttacaata tcataaaatc gctttgcaag 180  
gttaaggtat tgaaaatatc tgtcgaggat ttgaacaggt taatggaata catgagtata 240  
aatgaaatct tgaagagagc ttacgttgaa ataataaggt ctttgatgcc taaagttgtg 300  
tacatagact gtccagatat taatgtggag agatttaagc acgaaataga ggagagaacg 360  
ggagtggagg tatttgcgag ccataaagcg gacgagatat atccaatagt atctatagct 420  
tcgatagtcg caaaagttga aagggatttt gaaatagaca agctgaagaa gatttatgga 480  
gactttggga gtggatatcc atcagatcta agaaccatcg aatttttaag gagttatcta 540  
agggaaacaca aaagttttcc accaatcgta agaaagagat ggaaaactct caaaagattg 600  
acaacgcaca ctttaagcga tttctttgaa gtttag 636

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<220>  
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<223> PCR primer RN-F1 for cloning a gene encoding a polypeptide having  
a RNaseH activity from Archaeoglobus profundus

<220>  
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<222> (18)..(18)  
<223> n is a, c, g, or t

<400> 3  
ggcattgatg aggctgggnar rgg 23

<210> 4  
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a RNaseH activity from Archaeoglobus profundus

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<223> n is a, c, g, or t

<400> 4  
ggtagggaaa gctgraancg 20

<210> 5  
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<212> DNA  
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ctcttcacgc cacagtactc cg 22

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having a RNaseH activity from Archaeoglobus profundus

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<210> 7  
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 gtcccttgc tctcttgccg ttccagccga ccacggggcg cacctctctt tacgcggtct 180  
 ccccgtctgt gccttctcat ctgccggacc gtgtgcactt cgcttcacct ctgcacgtcg 240  
 catggagacc accgtgaacg gccaccaggt cttgcccaag ctcttacata agaggactct 300  
 tggactctca gcaatgtcaa caaccgacct tgaggcatac ttcaaagact gtttgtttaa 360  
 agactgggag gagttggggg aggagattag gttaaaggctc tttgtactag gaggctgtag 420

## HOKAZON01 (AOYB)\_ST25.txt

gcataaattg gtctgttcac cagcaccatg caactttttc acctctgcct aatcatctca 480  
 tgttcatgtc ctactgttca agcctccaag ctgtgccttg ggtggctttg gggcatggac 540  
 attgacccgt ataaagaatt 560

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 <212> DNA  
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<220>  
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<220>  
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<220>  
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 <222> (18)..(20)  
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<400> 11  
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<210> 12  
 <211> 22  
 <212> DNA  
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<220>  
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<220>  
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<220>  
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<400> 12  
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<210> 13  
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<220>  
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<222> (9)..(9)
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<210> 14
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49